

Frequently Asked Questions (FAQs)
COVID-19's Effect on the First Quarter of 2020 Advance Quarterly Services Report

Data Collection

How has the collection of Quarterly Services Survey data been affected?

Many businesses are operating in a limited capacity or have ceased operations completely. As a result, their ability to provide accurate, timely information to Census may be limited.

For the first quarter of 2020 Advance Quarterly Services Report, processing and data quality were monitored throughout the quarter. Quality metrics, such as response rate standards for publication, were continuously monitored and evaluated throughout the data collection period for the published industries.

Did the Census Bureau change its data collection procedures this quarter?

Yes. The Census Bureau utilizes a wide variety of collection methods for its surveys. Data, particularly from businesses, are collected on paper, online, and through telephone interviews and fax. Our National Processing Center (NPC) is responsible for mailing, faxing, data capture, responding to email messages, and handling inbound/outbound calls. Services offered by NPC have been limited to ensure employee safety but are starting to come back online. As a result, data collection is now occurring primarily via email requests and online reporting. Contacts to companies that have not responded may also be conducted via a phone tree operation supplemented with calling by NPC and/or headquarters staff.

Methodology

Were there any estimates withheld or delayed because of data collection problems?

First quarter estimates were released as scheduled. As part of the Census Bureau's methodological process, some estimates may be suppressed if they do not meet pre-existing publication standards.

Did the Census Bureau modify its usual weighting or estimation methods used to produce first quarter services estimates?

No. Standard weighting and estimation methods were used to produce all indicator estimates for the first quarter of 2020.

Did the Census Bureau do anything different in the first quarter of 2020 processing with data collected from fiscal reporters?

No. Data received from fiscal reporters was evaluated in a similar manner as is done in each quarter's processing. Since not all companies maintain their quarterly records on a calendar quarter, the Census Bureau accepts, evaluates, and uses the fiscal quarter data as part of the QSS collection unless it determines that the reported data are not representative of the calendar quarter.

Has the reliability of the quarterly services estimates changed?

No. The reliability of the services estimates as measured by the coefficient of variation for quarterly totals and the standard error for quarter-to-quarter change has not changed substantially. For the published industries, reported data for the first quarter of 2020 exhibited variation similar to that for prior quarters.

Seasonal Adjustment**Did the Census Bureau alter the procedures for developing the seasonally adjusted estimate for the selected services total?**

Yes. An alteration was made in an option in the Census Bureau's X-13ARIMA-SEATS seasonal adjustment software (the "additive outlier adjustment" option) for the first quarter of 2020 for the selected services total. This was done in effort to ensure that the published seasonally adjusted value fully includes any immediate effects. These effects are not typical first quarter effects and so should not be permitted to influence the seasonal factors for the first quarter and surrounding quarters. The altered option was applied to the selected services total whose first quarter unadjusted value was found to be statistically untypical, as indicated by the appropriate t-statistic having a magnitude larger than a commonly used "critical value," and for which there were independent indications of an impact. Such indications confirm that a first quarter survey value has an unusual potential to be untypical and justify the use of a standard critical value. In a usual quarter, every survey value is "blindly" tested, therefore a higher critical value is used, making it more difficult for the survey value to be classified as untypical.

What was the impact of altering the seasonal adjustment option (additive outlier adjustment) for the first quarter of 2020?

For the selected services total, if the first quarter value had been treated as typical, the program would have taken part of the impact to be a seasonal effect and would have adjusted the data in a way that would have brought the adjusted percent change from the fourth quarter of 2019 to the first quarter of 2020 closer to zero. The altered option we used determined the impact to the selected services total to be out of the ordinary. As a result, the fourth quarter 2019 to first quarter 2020 percent change in the adjusted value was left further from zero.

How was the survey value for the selected services total determined to be out of the ordinary?

Each quarter, independent indications of how the service industry performed are researched as part of our normal review of the estimates to detect reporting errors. This research includes, but is not restricted to, conversations with companies in our survey, a review of publicly available press releases from both companies and industry associations, and a review of other economic indicators.

This quarter, the first quarter 2020 value of the selected services total was considered to be out of the ordinary if it was found to be statistically untypical (as indicated by the appropriate t-statistic having a magnitude larger than a "standard" critical value) and independent sources indicated an impact.

Additional Information

Are there additional Census Bureau resources available on the COVID-19 Pandemic?

Yes. The Census Bureau has created a [COVID-19 reference page](#) which includes links to relevant Census data sources. There is also a more general [FAQ on the impact of COVID-19 on operations](#).

Source: U. S. Census Bureau
Economic Indicators Division

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